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## E.coli 0157:H7

What you need to know if there is an outbreak in your community

- Background information
- Prevention guidelines
- Protecting your children
- USDA--E. coli control efforts

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**United States Department of Agriculture**Food Safety and Inspection Service
JULY 1995

## Factsheet

USDA forms Epidemiology and Emergency Response Program to study the occurrence of foodborne illness and provide quick assistance in outbreaks

USDA's Food Safety and Inspection Service has established the Epidemiology and Emergency Response Program (EERP) as part of a commitment to safer meat and poultry products and improved public health. Directly focused on illness related to meat, egg and poultry products, EERP will handle product recalls and act as the liaison with state and local health departments to assist in rapid response to foodborne disease outbreaks.

Currently there is a Washington, D.C. headquarters staff and a liaison office at CDC in Atlanta. A rapid response staff or Field Epidemiology Emergency Team (FEET) has also been established and consists of 22 officers stationed across the country. These field personnel are FSIS meat and poultry production staff experts trained in the investigation of foodborne disease outbreaks.

The EERP staff enables us to provide greatly enhanced assistance to the public health community. Whenever a local health organization needs help with an outbreak investigation associated with consumption of meat, eggs or poultry products, this staff and the field personnel can assist in determining the source and distribution of contaminated product, investigating the production of the product or removing contaminated product from sale.

For more information on the EERP staff and their functions, call

Jacque Knight News Bureau (202) 720-9113.

#### **FEET Officers in the Field**

Indiana Illinois Dr. Ruth Spargur (217) 492-4500

Ohio Dr. William M. Hockman (614) 833-1405

Alabama Mississippi Dr. James L. Burt (601) 965-4312

Georgia South Carolina Dr. Franklin A. Norwood (706) 546-2125

**Kentucky** West Virginia Dr. Michaelle R. Fisher (706) 557-9737

North Carolina Tennessee Dr. Theora I. Jamison (615) 333-7786

**Florida Puerto Rico** Dr. Rafael Florit-Lebro (809) 760-8585

Alaska Washington Idaho Montana Dr. Mark P. Elliot (503) 339-5831

New York Vermont Dr. Mohammed S. Ibraheim (518) 464-6245

Wyoming Arizona Colorado North Dakota South Dakota Dr. Steven Wolpert (303) 351-0800, Ext. 591

Oregon Nevada Utah Dr. Alan Knox (503) 399-5831 Arkansas Oklahoma Dr. Ronald D. Powell (501) 751-8412

Kansas Nebraska Dr. Mohammad Abdullah (913) 267-7855

Louisiana Dr. Harry E. Moore (214) 767-0791

Missouri New Mexico Dr. Wayne E. Weber (512) 335-2366

Connecticut Rhode Island Maine Massachusetts New Jersey New Hampshire Dr. Florante R. Rellosa (215) 597-3829

Texas Dr. Steven G. Stoops (409) 764-1541

**Pennsylvania** Dr. Armia A. Tawadrous (717) 782-3413

**Iowa Minnesota** Dr. Michael E. Fisher (515) 292-7764

**Delaware Maryland Virginia** Dr. Richard C. Hackenbracht (804) 525-0177

Wisconsin Michigan Dr. Stephen V. Guryca (616) 941-0511

California Hawaii Dr. Adel A. Malak (510) 337-5054

## E. coli 0157:H7

### At a Glance

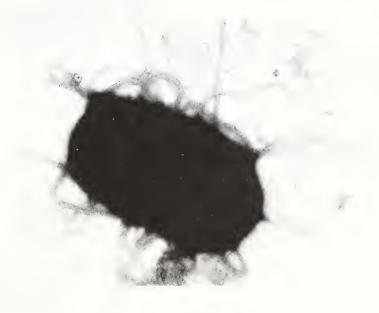
he bacteria E. coli O1 57:H7, also known just as O157, is a dangerous type of E. coli. Healthy cattle carry the bacteria. It can be transferred from animal to animal, animal to man, from animal to man on food and from person to person through close contact or food. NOTE: O157 can survive refrigeration and freezer storage. Thorough cooking to 160° F, which kills O157 bacteria, is recommended as a safeguard against infection. Careful kitchen sanitation is also vital.

Food sources. Undercooked hamburger and roast beef, raw milk, improperly processed cider, contaminated water and mayonnaise and vegetables grown in cow manure have caused outbreaks. Recently, contaminated cantaloupe and hard, dry sausages (salami) have made people sick. Increasingly, cross-contamination at food service outlets—delis, grocery carryouts and salad bars is causing outbreaks.

Person-to-person transmission of the illness, particularly among children in daycare, is another problem.

Outbreaks. Since the large Western States outbreak in January 1993, there have been nearly 50 smaller outbreaks in the United States. The national Centers for Disease Control and Prevention (CDC) estimate there may be 20,000 illnesses a year.

The illness. O157 is dangerous. It appears that just a few of these bacteria can make you sick. After an incubation period of 3-8 days, the disease normally lasts 4-10 days.



Patients may suffer severe abdominal cramps, diarrhea and sometimes bloody diarrhea.

Complications. Young children, the elderly and infirm may develop complications. They can develop HUS (hemolytic uremic syndrome) which can cause kidney failure, brain damage, strokes and seizures.

#### Protect yourself and your family

- Cook meat 160° F or until all pink is gone from the interior and any juices.
- In your kitchen Refrigerate or freeze all meat products as soon as you return from shopping.
   Wash hands after toileting or changing diapers and before food preparation in HOT, soapy water.
   Carefully wash your hands, utensils and work surfaces after contact with raw meats and their juices.

- Carefully wash all fruits and vegetables before eating. Scrub melons with a vegetable brush under running water before cutting into them.
- Avoid raw milk, untreated water and unpasteurized cider. Heat raw cider to 160° F before using.
- When eating out Check burgers for doneness—no pink in the center or in juices. Return any undercooked food for thorough cooking.
- Parents should make sure their daycare manager is aware of local health department procedures on infection control. Daycare workers should also be following guidelines to screen for symptoms of Ol57:H7 illness. This helps sick youngsters get prompt treatment and prevents them from infecting others.

July 1995

### An Outbreak of E. coli O157:H7

#### How could it happen?

#### On the farm

A few animals in a cattle herd are carrying the O157:H7 bacteria in their intestinal tracts. These bacteria don't make cattle sick, so the farmer or rancher has no way of knowing which animals to remove or isolate from the herd.

#### 2 At the meat plant

During processing, the Ol57:H7 bacteria from an infected animal's gut spreads to the meat surface. Later in the plant or at a grocery, this contaminated meat is mixed with other meat and ground for hamburger.

#### **3** Someone eats contaminated food

Food can be contaminated by OI57:H7 bacteria in two ways:

1) Bacteria in contaminated food are not thoroughly cooked;
or 2) The bacteria spreads in the kitchen from contaminated
items to food like salad or a mayonnaise dressing that is
eaten without cooking.

In our example, contaminated meat was used to make meatballs. A few meatballs were not cooked thoroughly enough to kill the OI57:H7 bacteria. The toddler contracts OI57:H7 from eating the undercooked meat.

### The toddler passes the illness to another child at daycare

The OI57:H7 bacteria can be passed from one person to another. In daycare centers, where many children are in diapers or not fully toilet-trained, this bacteria can spread quickly from the stool of an infected child through contact with daycare workers and other children.

#### **5** Symptoms of the disease

E. coli O157:H7 invades the human intestine. Most people are sick from 4 to I0 days with severe abdominal cramps, diarrhea and sometimes bloody diarrhea. But roughly 6 percent of victims, usually children, develop complications which can lead to kidney failure, seizures and other serious conditions. Complications may lead to strokes in the elderly.



Plant

Grocery

#### Ol57:H7 can spread in a number of ways

Illness from the Ol57:H7 bacteria has been caused by foods including undercooked ground beef, roast beef, raw milk, improperly processed cider, contaminated water, mayonnaise, cantaloupes, vegetables grown in cow manure and salami (a dry sausage). Outbreaks have also started in cross-contamination at food service outlets—delicatessens, grocery carryouts and salad bars.

Person-to-person transmission in families and daycare is on the rise.

#### Protect yourself and your family

- To kill the OI57:H7 bacteria, cook meat to I60° F or until all pink is gone from the interior and any juices.
- Refrigerate or freeze all meat products immediately when you return from shopping.
- Wash hands with hot, soapy water after using the toilet, changing diapers and before preparing food.

- Wash hands, utensils and kitchen surfaces with hot, soapy water after contact with raw meats and raw meat juices.
- Carefully wash all fruits and vegetables before eating. Scrub melons with a vegetable brush under running water before cutting into them.
- Avoid raw milk, untreated water and unpasteurized cider. Heat raw cider to I60° F before using.
- When eating out, check burgers for doneness (no pink in the center or in juices). Return undercooked food to complete cooking.
- Parents should make sure their daycare manager is following local health department procedures on infection control.
   Daycare workers should also be following guidelines to screen for symptoms of Ol57:H7 illness. This helps sick youngsters get prompt treatment and prevents them from infecting others.

### **Protecting Your Children**

### What you should know about E. coli O157:H7

by Mary Ann Parmley, U.S. Department of Agriculture

hat do you as a parent need to know about *E. coli* O157:H7? First, this foodborne bacteria is not an isolated phenomena. Children and adults are getting sick from eating fast food hamburgers, some have contracted the illness from raw milk, and some children have gotten sick from ground meat cooked at home.

Second, O157 has caused some real tragedies since the early 1980's. Children have died from complications like HUS (hemolytic uremic syndrome) which can cause kidney failure and other grave problems. Other youngsters survived but with serious health problems. What's going on?

Why an E. coli epidemic? Epidemiologists who study the spread of disease say some aspects of modern food production make these kinds of outbreaks more likely. Food is mass produced and as a result bacteria can easily spread through large volumes of product. People eat out more at high-volume restaurants which exposes hundreds to any mistake in food preparation.

While we are still learning about *E. coli* 0157:H7 and improving the meat inspection system, there are several basic safe cooking and handling instructions that can help protect your family.

#### Parents, Please

Inspect hamburgers - At home or eating out, make sure burgers are done. That means brown or gray in the middle. The E. coli bacteria is killed by higher cooking temperatures (160° F).

Cooking meat at home - Tomato or barbecue sauce turns a meat mixture red, making it harder to see if the meat is done. Cook these dishes thor-



Cut into or break open meat to check for doneness. Teach older children to check their own burgers.

oughly to a bubbling, steamy state. Poultry and fish should always be thoroughly cooked too.

Microwave carefully - Cover, rotate foods and let them stand after you take them out of the oven to ensure thorough cooking. Food, especially meats, cooked in the microwave should be hot and steaming.

At the Grill - Meat patties can look done on the outside but still have some pink inside. Slice to the center to make sure no pink remains. Serve cooked food with clean plates and utensils.

Wash your hands with hot, soapy water before preparing food or eating, particularly after using the bathroom or diapering a child. Also...wash your hands, utensils and work areas before and after contact with raw, meat, poultry or fish.

Milk - Raw milk can contain disease organisms including *E. coli O157:H7*. Use only pasteurized milk.

Water - Use only safe, treated water. Wild animals can carry E. coli in their systems and infect streams and ponds.

Fruits and vegetables - Wash all fruits and vegetables before eating.

#### If Your Child Is Sick

Bloody diarrhea, the chief sign of *E. coli O157:H7*, is not normal for any young child. So if your youngster has blood in the stool or diarrhea with severe abdominal pain, get medical help immediately.

Dr. Phillip Tarr, a pediatrician at Seattle Children's Hospital and Medical Center active in O157 research, advises parents to get a child with severe diarrheal illness to the pediatrician, family doctor or clinic promptly.

Make sure the practitioner has a stool sample tested. Quick diagnosis of O157 is critical since remedies for other kinds of diarrhea may make diagnosis and treatment of this illness more difficult.

Most people recover from O157 in about a week, but some 10 percent of patients, often children, develop complications like kidney problems and anemia which can be life-threatening. Complications from O157 are also a grave danger to the elderly.

Dr. Patricia Griffin, M.D., with the Centers for Disease Control, says you should remember that O157 can be transmitted from one infected person to another. Generally, you need to be careful to wash your hands after changing a sick child's diapers or cleaning up bed or bathroom accidents. Your health practitioner can provide detailed infection-control instructions.

For more information on food safety, call the USDA Meat and Poultry Hotline, tollfree, at 1-800-535-4555.

### **Day Care And Food Safety**

FACTS FROM THE U.S. DEPARTMENT OF AGRICULTURE

#### **Care-Givers & Children Should Wash Hands:**

 Whenever they come in contact with body fluids



- After toileting or changing diapers (Also wash the hands of the diapered child)
- After assisting a child with toileting
- Before handling food and after handling raw meat, poultry or fish
- Before and after eating meals and snacks
- After handling pets or other animals

To help prevent problems caused by foodborne bacteria like *E. coli* O157:H7 and other harmful strains, child care staff and children should wash their hands frequently during the day.

(NAPS) — Every morning, nearly half of the children under five years old in this country are taken to a child care center or a family day care home. As a parent, how do you know the food that's served is safe?

According to Dr. J. Glenn Morris, Jr. of the U.S. Department of Agriculture's Food Safety and Inspection Service, "Parents can get a pretty good idea of their child's risk of getting sick from food by seeing how well their child care provider pays attention to the basic rules of cleanliness and safe food handling."

As a parent, you can check out your child care provider by observing:

• How often do care-givers and children wash their hands? Staff and children should wash hands whenever they come in contact with body fluids; after toileting or changing diapers; before handling, preparing or touching food; before and after touching raw meat, poultry or fish; before and after eating meals and snacks; after handling pets.

 Does your child care provider clean and disinfect areas where children play and eat? • Are diaper-changing areas separate from eating areas? Keeping these areas separate helps prevent the spread of disease.

• Does your child care provider handle food safely? Child care providers should keep perishable foods such as meat, poultry and fish refrigerated or frozen, then thaw in the refrigerator or microwave; keep raw foods separate from other foods to prevent the spread of bacteria; thoroughly wash anything that touches raw foods and make sure raw foods are thoroughly cooked. Hamburger, for instance, should be cooked until there is no pink in the center. Hot foods should be kept hot and leftovers refrigerated promptly in small, shallow containers to speed cooling.

low containers to speed cooling.

"Parents and providers can get reminders on safe food handling by checking out the new 'Safe Handling Label' now included on packages of raw meat and poultry sold in grocery stores" says Dr. Mortis

stores," says Dr. Morris.

People interested in more information on safe food handling can call the USDA Meat and Poultry Hotline at 1-800-535-4555, weekdays from 10-4 p.m., E.T.

## GUIDELINES CONSUMER

••••••••••••

## COLD STORAGE TIMES GROUND MEAT AND GROUND POULTRY

# Refrigerator (40° F or below)

Days	1 to 2		
Product	Uncooked ground meat and ground poultry (bulk or patties)		

Cooked ground meat and ground poultry (hamburgers, meat loaf and dishes containing ground meats)

3 to 4

# Freezer (0 $^\circ$ F or below)

Product	Months
Uncooked ground meat and ground	
poultry (bulk or patties)	3 to 4
Cooked ground meat and ground poultry	
(hamburgers, meat loaf and dishes	
containing ground meats)	2 to 3

## TEMPERATURES FOR •••••••••••• INTERNAL

Product	Temperatu
Uncooked ground meat	160
Uncooked ground poultry	165

All cooked leftovers, reheated

SAFE COOKING

Product	Temperature
Uncooked ground meat	160° F
Uncooked ground poultry	165° F

Developed by

••••••••••••

Food Marketing Institute 800 Connecticut Avenue, N.W. Washington, DC 20006

American Meat institute Vashington, DC 20007 Post Office Box 3556

in cooperation with

## National Live Stock & Meat Board 444 N. Michigan Avenue

Chicago, IL 60611

# U. S. Department of Agriculture

14th Street & Independence Avenue, S.W. Food Safety and Inspection Service Washington, DC 20250 Extension Service

# Food and Drug Administration

Rockville, MD 20857 5600 Fishers Lane

For more information about the safe handling and preparation of ground meat and ground poultry, call USDA's Meat and Poultry Hotline toll-free at:

## 1-800-535-4555

or contact your local Cooperative Extension Service Office 10:00 a.m. to 4:00 p.m. Eastern time, Monday through Friday

Bacteria are part of our environment. Where there is food there may be bacteria. Proper food handling and cooking is the best way to prevent foodborne illness.

children, the elderly and those who have chronic illnesses or Generally, most at risk for developing foodborne illness are compromised immune systems.

ILLUSTRATOR, SUSIE DUCKWORTH



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# Consumer Guide

# Safe Handling

and Preparation

# GROUND

# MEAT

GROUND and

POULTRY



# COOL IT!



vacteria can multiply rapidly. Since you can't  ${\mathcal U}$  more perishable than most foods. In he danger zone between 40° and 140° F, I round meat and ground poultry are see, smell or taste bacteria, keep the products cold to keep them safe.

## Safe Handling

- wrapped. The meat surface exposed to air will be red; interior Choose ground meat packages that are cold and tightly of fresh meat will be dark.
- Put refrigerated and frozen foods in your grocery cart last and make the grocery store your last stop before home.
- Pack perishables in an ice chest if it will take you more than an hour to get home.
  - Place ground meat and ground poultry in the refrigerator or freezer immediately.
- room temperature. If microwave defrosting, cook immediately Defrost frozen ground meats in the refrigerator—never at

## Safe Storage

- Set your refrigerator at 40° F or colder and your freezer at 0° F or colder.
  - Keep uncooked ground meat and ground poultry in the refrigerator; cook or freeze within 1 to 2 days.
    - Use or freeze cooked meat and poultry stored in the refrigerator within 3 to 4 days.

Go for a walk? I'd love to.

But first, let me put my groceries away.

3 months.

For best quality, store frozen raw to 4 months; cooked meats, 2 to ground meats no longer than 3

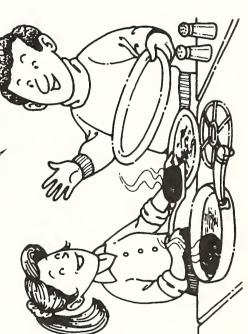
# CLEAN IT

 utensils, counters, cutting boards and sinks. That way, your food will stay as safe as eep EVERYTHING clean—hands

- Always wash hands thoroughly in hot soapy water before preparing foods and after handling raw meat
- Don't let raw meat or poultry juices touch ready-to-eat foods either in the refrigerator or during preparation.
- Don't put cooked foods on the same plate that held raw meat or poultry.
- Wash utensils that have touched raw meat with hot, soapy water before using them for cooked meats.
- Wash counters, cutting

don't forget to keep surfaces raw meats nave touched. And he inside of your ooards and other efrigerator clean.

before you take the meat bring you a clean plate out of the pan. Stop! Let me



# COOK IT



Nooking kills harmful bacteria. Be Psure ground meat and ground poultry are cooked thoroughly.

## Cook it safely

- The center of patties and meat loaf should not be pink and the juices should run clear.
- Crumbled ground meats should be cooked until no pink color remains.
- reach 160° F in the center; ground poultry patties and Ground meat patties and loaves are safe when they loaves, 165°F.

## Cook it evenly

- During broiling, grilling, or cooking on the stove, turn meats over at least once.
- When baking, set oven no lower than 325° F.
- If microwaving, cover meats. Midway through cooking, turn patties over and rotate the dish; rotate a meat loaf; and stir ground meats once or twice. Let microwaved meats stand to complete cooking process

After cooking, refrigerate leftovers immediately. Separate into small portions for fast cooling. To reheat all leftovers, cover and heat to 165° or until not and steaming throughout.

• • • • • • • • • • • • •

# RECOMENDACIONES PARA EL CONSUMIDOR

# REFRIGERACION PARA LA CARNE MOLIDA DE RES Y LA DE AVES

El refrigerador (40° F o más baja.)

Producto	Días
Carne molida de res y de aves cruda,	
a granel o en hamburguesa	1a2

Carne cocida de res y de aves (hamburguesas, "meatloaf" y otras recetas que contienen carne molida)

3 a 4

# El congelador (0° F o más baja)

<b>Producto</b> Carne molida de res y de aves cruda, a granel o en hamburguesa	Meses 3a4
Carne cocida de res y de aves (hamburguesas, "meatloaf" y otras recetas que contienen	
carne molida)	2 a 3

## TEMPERATURAS INTERNAS PARA COCINAR SIN PELIGRO

<b>Producto</b> Carne de res molida y cruda  Carne de aves molida y cruda  165° F
---

165° F

Productos cocidos recalentados

Producida por

••••••••••••

Food Marketing Institute and American 800 Connecticut Avenue, N.W. Post Oi Washington, DC 20006 Washing

American Meat Institute Post Office Box 3556 Washington, DC 20007

En colaboración con

# National Live Stock & Meat Board

444 N. Michigan Avenue Chicago, IL 60611

# U. S. Department of Agriculture

Food Safety and Inspection Service Extension Service 14th Street & Independence Avenue, S.W. Washington, DC 20250

# Food and Drug Administration

5600 Fishers Lane Rockville, MD 20857 Para más detalles sobre el manejo sanitario y la preparación de carne molida de res y de aves, llame gratis a la línea telefónica de emergencia del USDA al:

## 1-800-535-4555

10:00–4:00 de la tarde (horario del este), de lunes a viernes o comuníquese con la oficina más cercana de Cooperative Extension Service Office Las bacterias son parte de nuestro medio ambiente.

Donde hay comida puede haber bacteria. Para evitar enfermedades producidas en los alimentos, se debe manejar la comida correctamente. Generalmente, los niños, las personas mayores de edad, las que padecen de enfermedades crónicas y las que tienen el sistema inmune delicado son las que corren mayor riesgo de desarrollar enfermedades producidas en los alimentos.

DIBUJOS, SUSIE DUCKWDRIH



Manual para el Consumidor para la Preparación Saludable

CARNE MOLIDA DE RES



DE AVES

# LA REFRIGERACION



entre los 40° y los 140° F, donde la bacteria puede crecer rápidamente. Debido a que la bacteria no se Umás rápido que otros productos alimenticios. a carne molida, de res y de aves se deteriora -a zona peligrosa es cuando la temperatura está ouede ver, oler o saborear, refrigere todos los productos para mantenerlos fuera de peligro.

## Manejo Seguro

- Elija los paquetes de carne molida que estén frescos y bien empacados. La superficie de la carne expuesta al aire será roja y el interior de la carne será más oscuro.
- refrigeración al final de su compra antes de pagar. Su visita al mercado debe ser su última parada antes de ir a la casa. Recoja los alimentos congelados y los que requieren
  - Ponga los alimentos que se pueden deteriorar, en una caja con hielo si tarda más de una hora en regresar a su casa.
- Guarde la carne molida de res y de aves en el refrigerador o congelador inmediatamente.
- Descongele la carne molida dentro del refrigerador, nunca a lemperatura ambiente. Si usa horno de microondas para descongelar la carne, cocínela inmediatamente.

# Almacenamiento Seguro

- Mantenga la temperatura del refrigerador a 40° F, y la del congelador a 0° F o más baja.
- refrigerador por un máximo de 1 ó 2 días antes de cocinarla Mantenga la carne cruda molida de res y de aves en el o congelarla.

 Consuma o congele la carne cocida que ha sido mantenida en el refrigerador por un máximo de 3 ó 4.

guárdela en el congelador por un máximo de 3 ó 4 meses; la carne cocida por un Para conservar mejor la carne molida cruda, máximo de 2 ó 3 meses.

Ir de paseo!

# LA LIMPIEZA

refrigerador.

cortar y el lavadero. De esa forma sus alimentos Lutensilios, el mostrador, los tableros de # antenga todo limpio—las manos, los permanecerán lo más sanos posibles.

- antes de preparar los alimentos y después de manejar carnes Siempre lávese las manos con agua caliente y con jabón
- No permita que el jugo de la carne cruda se mezcle con otros alimentos durante la preparación o mientras éstos están en el refrigerador.
- No ponga los alimentos cocidos en el mismo plato donde hubo carne cruda.
- Lave con agua caliente y jabón todos los utensilios que haya usado para preparar la carne cruda antes de usarlos otra vez en las carnes cocidas.
  - Lave bien el mostrador, se olvide de mantener el tablero de cortar y limpio el interior del la carne cruda. Y no donde haya puesto otras superficies refrigerador

antes que saques la carne de que te traiga un plato limpio Espera! Déjame la sartén.



# LA COCCION



Assegúrese que la carne molida de res y de ि a cocción mata las bacterias dañinas. aves esté completamente cocida.

## Cocine sin peligro

- El centro de las hamburguesas y del "meatloaf" no deben estar crudos.
  - La carne molida debe cocinarse hasta que el color rosado desaparezca del centro.
- temperatura de 160° F en el centro, y la carne molida Las hamburguesas y el "meatloaf" requieren una de aves requiere una temperatura de 165° F.

# Cocine Uniformemente

- La carne que cocine en el horno, en la sartén o a la parrilla, se debe voltear, por lo menos una vez.
  - Mantenga el horno a no menos de 325° F cuando prepare carnes asadas.
- Cuando cocine en el horno de microondas, debe cubrir carne una o dos veces, y de la vuelta al recipiente. Una la carne. A la mitad del proceso, voltee o revuelva la vez cocida la carne, deje reposar para completar el proceso de cocción.

Después de servir, refrigere inmediatamente las sobras en porciones pequeñas para enfriar rápidamente.

Para recalentar las sobras, tápelas y recaliéntelas a 65° F o hasta que salga vapor y estén bien caliente. Since the *E. coli* Ol57:H7 bacteria was first identified as a pathogen affecting people in the early 1980s, the Food Safety and Inspection Service has been researching its surveillence and control. Many outbreaks have been linked to the meat products FSIS regulates.

Following the major Western States outbreak in January 1993 (some 700 persons affected, 4 deaths), FSIS sharply increased its efforts both to learn how this bacteria spreads through the environment and to prevent meat foods becoming contaminated with it in processing.

Reviewing major efforts, FSIS has:

- 1982 to present Funded direct research, worked cooperatively with
  universities and reviewed the efforts of private
  companies in efforts to develop accurate "quick
  tests" to detect the pathogen on meat products.
- Fall 1993 Mandated safe handling labels for all raw meat and poultry products. Partially pre-cooked items must be labelled too. The labels remind consumers of basic safe refrigeration, handling, cooking and storing rules for these perishable items.
- Fall 1994 Declared the E. coli Ol57:H7 bacteria an
   "adulterant," won a court challenge on the issue, and now meat known to contain the bacteria can not legally be sold.
- October 1994 Started a projected 5,000 sample testing program—half the tests in meat plants, half at retail stores—to test raw hamburger for E. coli Ol57:H7.
- Fall 1994 to present Allowed the meat industry greater latitude in proposing new in-plant wash, rinse and sanitizing procedures. As a result, new in-plant bacteria-killing treatments have been developed in record time. Several look promising in testing.

- February 1995 Published a sweeping proposed rule in the
  Federal Register, asking for comments on how the
  agency proposes to substantially revamp and revitalize meat and poultry inspection, emphasizing prevention of bacterial contamination with
  foodborne disease agents like E. coli O157:H7.
  - Spring-summer 1995 After publishing the new proposal, the agency has held a series of information briefings, scientific conferences and an open public hearing to focus the attention of interested and affected parties on how the new rule could be put into action to better protect the public from foodborne illness.

A two-day public hearing, at which some 100 different groups presented testimony, completed the 5-month public comment period which ends July 5, 1995. Publication of the final rule on inspection reform is expected late 1995. The new system would phase in beginning January 1996.

For further information, call:

Jacque Knight FSIS News Bureau Washington, D.C. 202 720-9113.

See other side for a public affairs officer in your region



### USDA PHONE NUMBERS FOR USE IN OUTBREAKS OF FOODBORNE ILLNESS

FOOD SAFETY AND INSPECTION SERVICE NEWS OFFICE

WASHINGTON, D. C.

CONTACT: JACQUE KNIGHT (202)720-9113

Regional Office	States	Contact	Telephone Number
North Eastern Philadelphia, PA	CT, DE, DC, NY, MD, ME, MA, VT, RI, NH, NJ, PA, VA	Anne McGuigan	215-597-3778
Western Alameda, CA	AK, AZ, CA, CO, HI, ID, MT, NV, ND, SD, OR, UT, WA, WY, GUAM, AMER. SAMOA, MARIANA ISLANDS	Bruce Kaplan	510-337-5047
South Western Dallas, TX	AR, KS, LA, NE MO, NM, OK, TX	Yves Gerem	214-767-1054
North Central Des Moines, IA	IL, IN, IA, MI, OH, MN, WI	J. P. Porter	515-284-6300
South Eastern Atlanta, GA	AL, FL, GA, KY, MS, NC, PUERTO RICO, SC, TN, VIRGIN ISLANDS, WVa	Mike Groutt	404-347-2906